

REMARKS

Claims 1-37 are in the case.

Claims 1-10, 14-27 and 32-37 are under consideration. Claim 1 has been amended. Support for the amendment can be found, e.g., on page 4, lines 14-18 and page 12, lines 17-19 of the original disclosure. Claim 21 has been amended to correct an typographic error. Claims 11-13 are withdrawn from consideration but would be rejoined upon allowance of the generic claim. Claims 28-31 are withdrawn from consideration but would be rejoined upon allowance of the product claims pursuant to MPEP 821.04.

I. Rejection of Claims Under Judicially created Doctrine of Obviousness-type Double Patenting over Claims 15-30 of Copending Application No. 09/724,490

Claims 1-10, 14-27 and 32-37 are provisionally rejected under judicially created doctrine of obviousness-type of double patenting over claims 15-30 of copending Application No. 09/724,490.

Applicants would like to defer the response to the rejection until allowable subject matter is indicated.

II. Rejection of Claims Under 35 U.S.C. §102(b) over Decker

Claims 1, 5-10, 16-20, 24-27 and 32-35 are rejected under 35 U.S.C. 102(b) over US 5,543,464 to Decker et al. (hereafter “Decker”).

Decker discloses a powder coating composition including a) an epoxy-functional acrylate polymer having an epoxy equivalent weight of between about 200 and about 650, b) a semi-crystalline polyester having poly-carboxylic acid functionality, and c) a crystalline curative having poly-carboxylic functionality (col. 1, lines 44-55). Decker discloses that the composition is formed in a conventional manner (col. 4, lines 3-3-4). Decker further discloses that the components of the composition are combined and extruded, e.g., at 120°C, then ground and screened to obtain a powder of appropriate size. (col. 4, lines 4-15; col. 6, lines 57-62). Decker discloses that the composition exhibits high gloss (col. 1, line 25).

Claim 1 is directed to a powder coating composition including a first component (a) and a second component (b). The first component includes a melt-blended mixture of (i) at least one glycidyl group-containing acrylic resin having epoxide equivalent weight of from about 250 to about 1500 and glass transition temperature of from about 30° C to about 80° C; and (ii) a curing agent selected from the group consisting of dicarboxylic acids, dicarboxylic acid anhydrides, and mixtures thereof. The second component (b) is dry-blended with the first component (a) and includes at least one carboxyl-group containing material that has acid number of from about 10 to about 300 and that is not substantially compatible with the first component (a).

In the Specification, it is described that the claimed composition exhibits low gloss. (Specification, page 4, lines 1-3; page 23, Table I).

Decker discloses a conventional melt-blended composition that exhibits high gloss. All the components of the Decker's composition are combined and extruded at 120°C, then ground and screened to obtain a powder of appropriate size. (col. 4, lines 3-15). Decker does not disclose a powder coating composition that includes a dry blend of a first component (a) and a second component (b), in which the first component includes a melt-blended mixture of ingredients (i) and (ii) and the second component is dry-blended with the first component (a). Lacking at least these required elements of claim 1, Decker does not and cannot anticipate claim 1. Claims 5-10, 16-20, 24-27 and 32-35, each depending from claim 1, are also novel over Decker for the same reason delineated above.

Accordingly, the rejection of claims 1, 5-10, 16-20, 24-27 and 32-35 under 35 U.S.C. §102(b) over Decker is unwarranted. Applicants respectfully request that it be withdrawn.

III. Rejection of Claims Under 35 U.S.C. §103 (a) over Decker

Claims 2-4, 14, 15 and 21-23 are rejected under 35 U.S.C. 103(a) over US 5,543,464 to Decker et al. (hereafter "Decker").

Claims 2-4, 14, 15 and 21-23 are dependent from claim 1. The rejection of claims 2-4, 14, 15 and 21-23 under 35 U.S.C. 103(a) over Decker is based on the above refuted rejection that Decker discloses the composition of claim 1, and therefore, is unwarranted.

In addition to the differences between Decker and the claimed invention addressed in the above item II, Applicants submit that Decker does not teach or suggest a powder coating composition including a dry-blend of an acid functional polyester with a melt-blend of an epoxy-functional acrylic resin and an acid functional curative to achieve a low gloss coating. Decker discloses a conventional melt-blended composition that exhibits high gloss (col. 1, line 25), whereas the claimed dry-blended coating composition exhibits significantly reduced gloss. For example, the claimed composition exhibits unexpected gloss reduction as illustrated by Examples 1-5 relative to Comparative Examples 1-2. In Comparative Example 1, a coating composition including melt-blended component (a) without component (b) exhibits a 60° gloss of 55. In Comparative Example 2, a coating composition including melt-blended component (a) and component (b) that is an acid functional polyester exhibits a 60° gloss of 58, indicating no gloss reduction when the second component (b) is melt-blended with the first component (a). In contrast, in Examples 1-5, when the same second component (b) is dry-blended with the first component (a), there are significant gloss reductions as shown in Table I, e.g., a 60° gloss of 34 in Example 4. Further gloss reduction can be obtained using dry-blended acid functional acrylic as the second component (b) as illustrated by Examples 6-10, e.g., a 60° gloss of 16 in Example 10. It is known that the conventional powder coating compositions are melt-blended powder mixtures because the powder coating industry has been using the melt mixing method to make powder coating compositions, as shown by Decker for example; and the dry-blending method practically cannot make acceptable powder mixtures for most end uses in terms of the degree of the uniformity, dispersion and application characteristics of the dry-blended powders. However, the claimed composition including a dry-blend of components (a) and (b) exhibits unexpected result of significantly reduced gloss without sacrificing other coating properties.

Accordingly, the rejection of claims 2-4, 14, 15 and 21-23 under 35 U.S.C. 103(a) over Decker is unwarranted. Applicants respectfully request that it be withdrawn.

IV. Rejections of Claims Under 35 U.S.C. §102 (e) and §103 (a) over Daly

Claims 1-5, 9, 10, 16-20, 24-27 and 32-35 are rejected under 35 U.S.C. 102(e) over US 6,407,181 B1 to Daly et al. (hereafter "Daly"). Claims 21-23, 36 and 37 are rejected under 35 U.S.C. 103(a) over Daly.

Applicants submit that the present invention was conceived and reduced to practice prior to August 21, 2000--the filing date of the Daly reference, as evidenced by the inventors' Declaration under 37 C.F.R 1.131, a copy of which is herewith submitted.

Accordingly, Applicants submit that the rejection of claims 1-5, 9, 10, 16-20, 24-27 and 32-35 under 35 U.S.C. 102(e) over Daly as well as the rejection of claims 21-23, 36 and 37 under 35 U.S.C. 103(a) over Daly are unwarranted and request that they be withdrawn.

In view of all the forgoing, Applicant submits that the claims now pending in the application are in condition for allowance and action in accordance therewith is respectfully requested. In the event that claims are not allowed, the Examiner is invited to telephone the undersigned should a teleconference interview facilitate the prosecution of the application to allowance.

Respectfully submitted,

Date : 03/24/2005

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